

PS 8340.08 PRODUCTION SCHEDULING - FPI



Program Statement

OPI: FPI
NUMBER: 8340.08
DATE: 6/25/2001
SUBJECT: Production Scheduling,
FPI

1. **PURPOSE AND SCOPE.** To revise Corporate policies regarding the development and maintenance of production schedules in Federal Prison Industries (FPI) factories and ensure that the benefits of using the Shop Floor Control (SFC) and Material Requirements Planning (MRP) modules of **Millennium** are attained at locations implementing these modules.

2. **SUMMARY OF CHANGES.** Highlights of changes include:

a. Requirements are established for local standard operating procedures to maintain the **Millennium** system.

b. Responsibilities are defined more clearly for using **Millennium** tools and reports to establish and maintain production schedules.

c. Production schedule stability is defined better and requirements are established to develop action plans to correct trends of poor production schedule stability.

d. Guidance is provided for production schedule changes due to unanticipated production delays.

3. **PROGRAM OBJECTIVES.** The expected results of this program are:

a. Inventory will be managed using the MRP module to plan and order raw materials, so that materials are received when needed and inventory levels are reduced.

b. Factory capacity will be managed effectively to identify work center overloads early in the planning process and allow sufficient time for appropriate adjustments to prevent delinquent customer orders.

c. Delivery performance will be improved by establishing

achievable production schedules and increasing schedule stability.

d. Customers will be quickly informed when their requested delivery requirements cannot be met.

4. **DIRECTIVES RESCINDED**

PS 8340.06 Production Scheduling, FPI (3/19/99)
OM 043-00 (8340) Production Scheduling - FPI (10/5/00)

5. **STANDARDS REFERENCED.** None

6. **RESPONSIBILITIES**

a. The Associate Warden, Industries (AWI) or the Superintendent of Industries (SOI) will:

- ! Ensure that production schedules are consistent with production capacity and order delivery dates, allowing sufficient shipping lead time.
- ! Ensure that the MRP module is used to plan and order materials.
- ! Develop standard operating procedures which identify roles and responsibilities of local staff to perform the various **Millennium** functions necessary to support the SFC and MRP modules' viable operation.

b. The Factory Manager will:

- ! Monitor incoming customer orders to ensure delivery dates are realistic and achievable and notify the Customer Service Center (CSC) within three working days if the delivery date cannot be met.
- ! Develop production plans to meet the required delivery dates of accepted customer orders.
- ! Review Electronic Data Transfer (EDT) and Data Collision Reports daily and resolve any discrepancies with the CSC within three working days.
- ! Ensure sufficient material availability by generating purchase requests for raw materials based upon recommendations of MRP Order Action Reports.
- ! Use **Millennium** picklists to requisition materials and

work center dispatch lists to plan work center production.

- ! Monitor daily operations to ensure the production schedule is maintained.

- ! Approve any changes to the production schedule.

At the AW/SOI's discretion, many of the Factory Manager's responsibilities may be delegated to the Production Controller or Materials Manager if the location is staffed accordingly.

7. PRODUCTION PLANNING. The Factory Manager will develop production plans that are consistent with the required delivery dates of customer orders and demonstrated factory capacities. These plans are to be reviewed monthly at the Operations Review Meeting, attended by the:

- ! AW/SOI,
- ! Factory Manager,
- ! Business Manager/Plant Controller,
- ! Quality Assurance Manager, and
- ! Procurement Agent/Contracting Officer.

Attendees will assess the status of current operations and identify any potential constraints which may prevent the production plan from being achieved successfully.

The Factory Manager will identify any areas for which the required capacity is greater than demonstrated capacity and develop plans to address the capacity shortage through:

- ! job rescheduling,
- ! hiring of additional inmates,
- ! overtime, or
- ! other appropriate means.

If customer orders become overloaded to the extent that viable production plans, consistent with customer order delivery requirements, cannot be established, the AW/SOI will confer with the appropriate Program Manager and the CSC and submit a written recovery plan to the Senior Program Manager. This plan will include an analysis of the overloaded condition's causes and identify steps to prevent recurrence.

8. **MATERIALS REQUIREMENTS PLANNING.** The Stock Requirements List (MD04) will be used to make purchasing decisions for materials as well as decisions for releasing production orders. Normally, the Factory Manager or the designated production planner/scheduler generates these reports weekly but they may be generated more or less frequently, depending upon:

- ! volume and frequency of new orders,
- ! production and acquisition lead times, and
- ! major schedule changes.

Adherence to the recommendations of the Stock Requirements List helps to ensure that material purchases and job releases are timed to meet the required order delivery dates while minimizing inventory levels. Potential material shortfalls will be evaluated to determine the impact upon the production schedule and the ability to meet the delivery date of any customer orders affected.

9. **PRODUCTION SCHEDULE STABILITY.** Production schedule stability (PSS) of 85 percent or better is needed to ensure the SFC and MRP modules work as intended. Major changes to the production schedule should be made only when the urgency of the need dictates and after a thorough review of:

- ! availability of materials,
- ! sufficiency of lead times,
- ! impact on work center capacities,
- ! impact on inventory levels, and
- ! impact on delivery of other orders.

Minor changes to the production schedule, such as the expediting of customer orders, are to be accommodated with safety stock to the extent possible. If such changes occur frequently, consideration should be given to:

- ! increasing safety stocks,
- ! producing to forecast, or
- ! other contingency plans.

Production schedule stability for a given period is determined by the following formula:

$$\frac{\text{Number of Jobs With No Changes}}{\text{Number of Released Jobs}} \times 100 = \text{PSS \%}$$

Job changes include:

- ! changes to job quantities,
- ! start dates, or
- ! end dates.

The Factory Manager will monitor the frequency, urgency, and reasons for job changes and develop an action plan to identify and correct the root causes of continued failure to maintain a PSS of 85 percent or better.

10. **PRODUCTION SCHEDULE CHANGES.** Changes to the production schedule may be driven by:

- ! receipt of new orders with short lead times,
- ! customer requests to expedite, delay, or cancel orders,
- ! lack of sufficient orders to meet Memorandum of Agreement (MOA) production goals, or
- ! unanticipated production delays.

The AW/SOI must approve schedule changes:

- ! affecting the approved MOA,
- ! exceeding the factory's demonstrated capacity,
- ! resulting in a delinquent customer order, or
- ! resulting in the production of a customer order more than 30 days prior to authorized shipment.

The Factory Manager must also advise the CSC or Program Manager (Textiles contracts) to notify any affected customers. Upon resolving any concerns the customer raised due to the proposed change, the Factory Manager will modify the production date in **Millennium** to reflect the revised planned production date and explain the change in the production order long text file. This will ensure that customers have access to current information through the CSC or the Internet.

a. **Requests to Expedite or Add New Orders with Lead Times Shorter than Established Time Frames.** The Factory Manager will review the material requirements of these orders and work center capacities to determine if materials are available and if acceptance of these requests will impact the required delivery of other orders.

Conflicts will be reviewed with the AWI/SOI and the Program Manager. Consideration will be given to the critical nature of the request and the impact on other orders prior to making a final decision to proceed.

b. **Requests to Delay or Cancel Orders.** Factory Managers must review these requests immediately since the impact on inventories may be severe. If the job has already been released and work has begun, he or she must determine quickly a course of action. Options for consideration include:

- ! complete the job and hold the finished items until the new delivery date,
- ! modify or cancel the job on the floor,
- ! apply in process materials to other orders,
- ! return in process materials to storage, or
- ! apply the finished items to other orders.

If the job has not been released, the Factory Manager will advise the Contract Specialist to contact vendors and attempt to delay or cancel purchase orders for materials not yet received.

The Factory Manager must also advise the CSC of any customer-initiated delivery date changes or cancellations for appropriate modifications to the Customer Order Entry Database (COED).

c. **Lack of Sufficient Orders to Meet MOA Production Goals.** If factories are not loaded properly with orders, production schedule stability will be increasingly difficult to maintain. Then, orders will not be manufactured more than 30 days early to meet MOA production targets without the Program Manager's approval.

Prior to making a decision to produce orders sooner than originally scheduled, material availability reports and work center capacities must be checked to ensure that the change can be accommodated. Before rescheduling the job, the Factory Manager must review the contract's terms and notify the CSC or Program Manager (Textiles contracts) to contact the customer to determine if early delivery is acceptable.

d. **Unanticipated Production Delays.** These may result from material shortages, machinery breakdowns, lockdowns, or a number of other legitimate reasons. The Factory Manager will determine the impact of such delays on customer orders and confer with the AW/SOI and Program Manager to determine a course of action.

The Factory Manager will review the Load Profile by Work Center Report weekly. If a work center's load exceeds 25 percent of monthly capacity, job rescheduling may be needed to relieve the overloaded situation.

If a work center is overloaded continuously over several weeks, the Factory Manager will investigate to determine the reasons and submit an action plan to the AW/SOI to correct the problems identified.

/s/

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Director